

1.5. What is claimed is:

1. A data management system, comprising:

an interface connecting the system to one or more data sources;

5 at least one facility linked to the interface for managing the one or more data sources;
and

at least one portal comprising a plurality of data viewers, each having access to a data source and being configured to perform analysis of data in the data source and displaying the results of an analysis, each portal having one or more of the following management features:

10 create, save, open, edit, merge and destroy.

2. The system of claim 1, wherein at least one of the data sources is remotely accessible via telecommunications network.

3. The system of claim 2, wherein the telecommunications network is one of: the Internet, an intranet, an extranet linked to an intranet.

15 4. The system of claim 1, wherein the interface is connected to at least two data sources that operate under different data systems.

5. The system of claim 1, wherein the one or more data sources include one or more of the following data systems: DB2, Oracle, Sybase, INFORMIX, MS SQL SERVER, IMS, PDS, QSAM and VSAM or any combination thereof.

20 6. The system of claim 1, wherein the interface comprises a data source controller configured to create, edit, organize, select, and delete connection specifications for said one or more data sources.

7. The system of claim 1, wherein data viewers are one or more of: a plexus viewer showing data relationships using link-node style diagrams; a table viewer showing data in a table format; record viewer showing a row of data at a time, an SQL dialog and viewer for
25 general SQL commands, and a chart viewer showing data in a chart format.

8. The system of claim 1, wherein the at least one portal enables concurrent visualization and manipulation of data from different sources.

9. The system of claim 1 further comprising a state-save facility that records the
30 status of the system operations.

10. The system of claim 9, wherein the state-save facility records the status of the system operations, such that the status can be restored in an open environment.

11. The system of claim 9, wherein the state-save facility comprises a facility for monitoring and recording data sources used by viewer to which each data source is
35 associated.

12. The system of claim 11, wherein portals can be opened and closed and information from the state-save facility can be used to restore the last state of a saved portal upon re-opening the portal.

5 13. The system of claim 11, wherein contents of one portal can be merged with another portal.

14. The system of claim 12, wherein contents of one portal can be merged with another portal in the same user session.

15. The system of claim 12, wherein contents of one portal can be merged with another portal in different sessions of the same user.

10 16. The system of claim 12, wherein contents of one portal can be merged with another portal in a different session of different users.

17. The system of claim 10, wherein the state-save and load facility enables sharing of the data sources among a plurality of users.

15 18. The system of claim 17, wherein contents of one portal can be merged with another portal in a different session of different users in later points in time.

19. The system of claim 1, wherein the interface operates with any JDBC connectivity.

20. The system of claim 1, wherein the at least one managing facility is configured to create a test data set.

20 21. The system of claim 1, wherein the managing facility is configured to compare the contents of two or more data sources.

22. The system of claim 1, wherein the managing facility is configured to compare the contents of more than two data sources.

25 23. The system of claim 1, wherein the managing facility is configured to perform one or more of the following: querying a data set, updating a data set, saving a data set, restoring a data set, and restructuring a data set.

24. The system of claim 1 further comprising a transcript facility that provides a record of actions performed in the system.

30 25. The system of claim 24 further comprising one or more read-only transcript facilities.

26. The system of claim 25 further comprising one or more user-editable transcript facilities.

27. A data quality control system, comprising:

an interface connecting the system to a plurality of data sources;

35 at least one portal operatively connected to the interface, the portal comprising a plurality of data viewers, each having access to a data source and being configured to perform analysis of data in the data source and displaying the results of an analysis; and

data input facility including a graphical user interface for selecting one or more data sources of data to be analyzed and the type of data analysis to be performed.

28. The system of claim 27, wherein the at least one portal comprises means for saving data analysis.

5 29. The system of claim 28, wherein the means for saving comprises one or more of: a save portal state process, a restore portal state process, a share portal state process, a save data source definitions process, a restore data source definitions process, and a share data source definitions process.

10 30. The system of claim 27, wherein data viewers of a portal comprise one or more of: a plexus viewer, a table viewer, a chart viewer, a record viewer showing a row of data at a time, and a SQL dialog and viewer for general SQL commands.

31. The system of claim 27, wherein the at least one portal is associated with a directory controller.

15 32. The system of claim 31, wherein the directory controller is a data source directory controller.

33. The system of claim 27 further comprising means for comparing data in at least two data sources.

20 34. The system of claim 27, wherein the one or more data sources include one or more of the following data systems: DB2, Oracle, Sybase, INFORMIX, MS SQL SERVER, IMS, PDS, QSAM and VSAM or any combination thereof.

35. The system of claim 27, wherein at least two data sources operate under different formats.

25 36. The system of claim 35, wherein the plurality of data sources include one or more of the following data systems: DB2, Oracle, Sybase, INFORMIX, MS SQL SERVER, IMS, PDS, QSAM and VSAM or any combination thereof.

37. The system of claim 27, wherein the interface operates with any JDBC connectivity.

38. The system of claim 27 further comprising a context sensitive help facility.

30 39. The system of claim 38, wherein the context sensitive help facility is actuated by clicking the right button of a mouse.

40. A method for providing context sensitive help in an environment comprising toolbar or menu items, comprising the steps of:

receiving input from a user directing a cursor of a computer mouse to a position over one of the toolbar or menu items;

35 receiving user input corresponding to a click of the right button of the mouse;

locating a help file associated with the toolbar or menu item being selected by the click; and

displaying information from the help file to the user in a pop-up window located near the toolbar or menu item being selected by the click.

41. A data quality control method, comprising the steps of:

a) selecting data from one or more data sets using specified selection criteria;

5 b) creating at least one new data set from the selected data;

c) modifying the created at least one new data set to represent conditions required to test an application program;

d) comparing one or more modified data sets to a reference data set; and

e) creating a data set of differences between the modified and the reference data sets,

10 wherein steps (a) – (e) are preformed using a graphical user interface (GUI) configured to display concurrently data possibly having different data formats and to initiate data analysis operations on a defined data set.

42. A data quality control method, comprising the steps of:

a) selecting data from two or more data sets using specified selection criteria;

15 b) comparing two or more selected data sets; and

c) creating a data set of differences between the data sets being compared,

wherein steps (a) – (c) are preformed using a graphical user interface (GUI) configured to display concurrently data possibly having different data formats and to initiate data analysis operations on a defined data set.

20 43. The method of claim 42, wherein displaying data concurrently is performed using a portal comprising a plurality of data viewers, each having access to a data source and being configured to perform analysis of data in the data source and displaying the results of an analysis.

25 44. In a data management system comprising an interface connecting the system to one or more data sources and at least one portal having a plurality of data viewers, each data viewer having access to a data source and being configured to perform analysis of data and displaying the results of an analysis, a processing method comprising the steps of:

monitoring and recording data source definitions used by each portal for data sources accessed in a work session;

30 monitoring and recording the state of viewers associated with data sources accessed in the work session;

closing of one or more portals in response to a user command;

storing in a memory location of data source definitions and viewers' states that exist at the time when the closing command is received; and

restoring the data source definitions and viewers' states from the memory location in response to a user command directing the opening of one or more closed portals.

45. The method of claim 44, wherein the step of closing is in response to a command to terminate the work session.

- 5 46. The method of claim 44, wherein the step of restoration is performed without user intervention.